What is claimed is:

1. A lens, comprising:

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness lines extending from an outermost edge to an innermost edge of the thin zone, each line having a thickness that is different from each other line and wherein in each of the thin zones, the thickness linearly increases from outermost line to innermost line.

2. A lens, comprising

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness arcs extending from an outermost edge to an innermost edge of the thin zone, each arc having a thickness that is different from each other arc and wherein in each of the thin zones, the thickness linearly increases from outermost arc to innermost arc.

3. A lens, comprising:

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness lines extending from an outermost edge to an innermost edge of the thin zone, each line having a thickness that is different from each other line and wherein in each of the thin zones, the thickness non-linearly increases from outermost line to innermost line.

4. A lens, comprising

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness arcs extending from an outermost edge to an innermost edge of the thin zone, each arc having a thickness that is different from each other arc and wherein in each of the thin zones, the thickness non-linearly increases from outermost arc to innermost arc.

5. The lens of claim 1, wherein the first thin zone is symmetrical about the 90 degree point on the lens periphery and the second thin zone is symmetrical about the 270 degree point on the lens periphery.

6. The lens of claim 2, wherein the first thin zone is symmetrical about the 90 degree point on the lens periphery and the second thin zone is symmetrical about the 270 degree point on the lens periphery.

7. The lens of claim 3, wherein the first thin zone is symmetrical about the 90 degree point on the lens periphery and the second thin zone is symmetrical about the 270 degree point on the lens periphery.

8. The lens of claim 4, wherein the first thin zone is symmetrical about the 90 degree point on the lens periphery and the second thin zone is symmetrical about the 270 degree point on the lens periphery.

9. The lens of claim 5, wherein the first thick zone is symmetrical about the 0 degree point on the lens periphery and the second thick zone is symmetrical about the 180 degree point on the lens periphery.

10. The lens of claim 6, wherein the first thick zone is symmetrical about the 0 degree point on the lens periphery and the second thick zone is symmetrical about the 180 degree point on the lens periphery.

11. The lens of claim 7, wherein the first thick zone is symmetrical about the 0 degree point on the lens periphery and the second thick zone is symmetrical about the 180 degree point on the lens periphery.

12. The lens of claim 8, wherein the first thick zone is symmetrical about the 0 degree point on the lens periphery and the second thick zone is symmetrical about the 180 degree point on the lens periphery.

13. The lens of claim 1, 2, 5, 6, 9, or 10, wherein the thin zones are designed according to the equation:

$$T = T_{max} - (y - y_0)\frac{(T_{max} - T_{min})}{(y_1 - y_0)}$$

wherein T_{max} is a maximum thickness at $y = y_0$;
T_{min} is a minimum thickness at $y = y_1$;
y is a function variable; and
y_0 and y_1 each are points along a y axis.

14. The lens of claim 1, 2, 5, 6, 9, or 10, wherein the thin zones are designed according to the equation:

$$T = T_{\max} - (r - r_0)\frac{(T_{\max} - T_{\min})}{(r_1 - r_0)}$$

wherein T_{max} is a maximum thickness at $r = r_0$;
T_{min} is a minimum thickness at $r = r_1$;
r is a function variable; and
r_0 and r_1 are each points along an r-axis

15. The lens of claim 3, 4, 7, 8, 11, or 12, wherein the thin zones are designed according to the equation:

$$T - T_{\min} + T_d.\cos\left[\frac{\pi.(y - y_0)}{2.(y_1 - y_0)}\right]^{\alpha}$$

wherein T_{min} is the minimum thickness at $y = y_1$;
$(T_{min} + T_d)$ is the maximum thickness at $y = y_0$;
α is coefficient that controls the shape of the transition in thickness from T_{min} to $(T_{min} + T_d)$;
y is a function variable; and
y_0 and y_1 are points along a y axis.

16. The lens of claim 1, 2, 5, 6, 9, or 10 wherein the lens is a toric contact lens.

17. The lens of claim 1, 2, 5, 6, 9, or 10 wherein the lens is a bifocal contact lens.

18. The lens of claim 1, 2, 5, 6, 9, or 10 wherein the lens is a progressive multifocal contact lens.

19. The lens of claim 3, 4, 7, 8, 11, or 12 wherein the lens is a toric contact lens.

20. The lens of claim 3, 4, 7, 8, 11, or 12 wherein the lens is a bifocal contact lens.

21. The lens of claim 3, 4, 7, 8, 11, or 12 wherein the lens is a progressive multifocal contact lens.

22. A method for producing contact lenses comprising the step of designing a lens comprising:

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness lines extending from an outermost edge to an innermost edge of the thin zone, each line having a thickness that is different from each other line and wherein in each of the thin zones, the thickness linearly increases from outermost line to innermost line.

23. A method for producing contact lenses comprising the step of designing a lens, comprising

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness arcs extending from an outermost edge to an innermost edge of the thin zone, each arc having a thickness that is different from each other arc and wherein in

each of the thin zones, the thickness linearly increases from outermost arc to innermost arc.

24. A method for producing contact lenses comprising the step of designing a lens, comprising:

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness lines extending from an outermost edge to an innermost edge of the thin zone, each line having a thickness that is different from each other line and wherein in each of the thin zones, the thickness non-linearly increases from outermost line to innermost line.

25. A method for producing contact lenses comprising the step of designing a lens, comprising

a first and a second thick zone and a first and second thin zone within the lens periphery;

a thickness differential of about 200 to about 400 μm

wherein each of the thin zones comprises a plurality of horizontally extending iso-thickness arcs extending from an outermost edge to an innermost edge of the thin zone, each arc having a thickness that is different from each other arc and wherein in each of the thin zones, the thickness non-linearly increases from outermost arc to innermost arc.